

UMASS/AMHERST



312066016773840

The Commonwealth of Massachusetts
Executive Office of Human Services
Department of Public Health

150 Tremont Street

Boston 02111

Bailus Walker, Jr., Ph.D., M.P.H.

COMMISSIONER

DEC 01 1988

1985 MASSACHUSETTS INFANT MORTALITY AND RELATED DATA

University of Massachusetts
 Depository Copy

The attached tables present some of the latest available data on neonatal and infant deaths, low birthweight, prenatal care utilization and teen births for Massachusetts and its larger cities and towns. A more extensive narrative summary of the 1985 data as well as information for each city and town are also available.

Highlights include:

- Neonatal and Infant Mortality. The statewide infant mortality rate (IMR number of infant deaths for every 1,000 live births) increased from 8.9 in 1984 to 9.1 in 1985. The IMR for blacks rose from 17.0 to 22.1 in 1985. There was a sharp increase in the IMR for Boston, from 11.7 to 15.4. The increases in infant mortality can be attributed to a rise in the number of neonatal (in the first 28 days of life) deaths. There were 66 neonatal deaths in Boston in 1984. In 1985, there were 101. The increases are disturbing, and the possible reasons are being investigated.
- Prenatal Care Utilization. Combining trimester of registration, number of visits, and adjusting for gestational age of the infant, "adequacy of prenatal care" can be measured. The percent of women receiving adequate prenatal care in 1985 continued to decline, a trend which began in 1981. At that time, the percent of women receiving adequate care was 83%. By 1984, the figure was 79.7%, and in 1985 it declined further to 78.6%. However, the decline was not uniform across communities. In some cities there was as much as a 7% decline from 1984 to 1985, while adequate utilization increased in other cities.
- Births. The total number of births in Massachusetts increased in 1985 to 81,776 from 78,198 in 1984, an increase of 4.4%. The next highest increase in the previous 5 years was 2.8% (1983 to 1984). The percent of births to teenagers continued to decline in 1985. In 1984, 9% of births were to teens, whereas in 1985, the figure dropped to 8.5%. In comparison, 10.1% of all births were to teens in 1981. There was little change in the statewide percentage of low birthweight (under 2500 grams or 5 1/2 pounds) babies, although there were declines in low birthweight rates in many cities, including Boston, and among Blacks and Hispanics.

There are some limitations which need to be considered in the interpretation of these data:

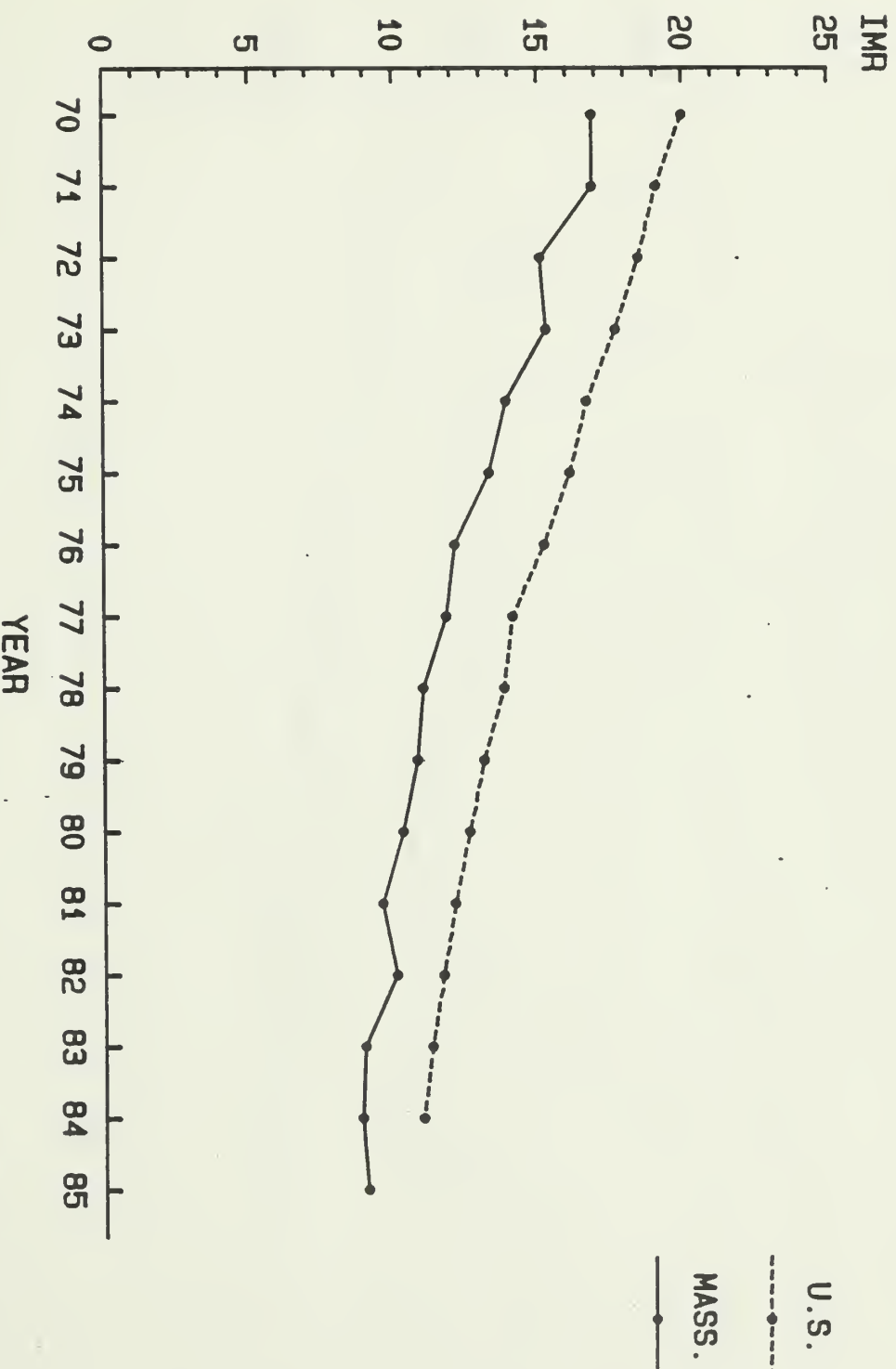
1. The number of vital events reported for racial/ethnic groups may be inconsistent. This is partially accounted for by the fact that all racial classifications used in Vital Statistics are self-reported. Secondly, the racial coding system in effect for 1985 for vital records was not designed to reflect both race and ethnicity. This is a problem for the classification 'Hispanic', whose members may also be identified as Black or White. For these reasons, vital events reported by race or ethnicity should be interpreted with caution.
2. Changes in rates from year to year should be interpreted cautiously for smaller cities and towns since a large rate change may result from a small change in the absolute number of events.
3. Adequacy of prenatal care utilization data for Boston should be interpreted cautiously as there are some questions about these data which are currently under study.



Digitized by the Internet Archive
in 2014

<https://archive.org/details/1985massachusetts00mass>

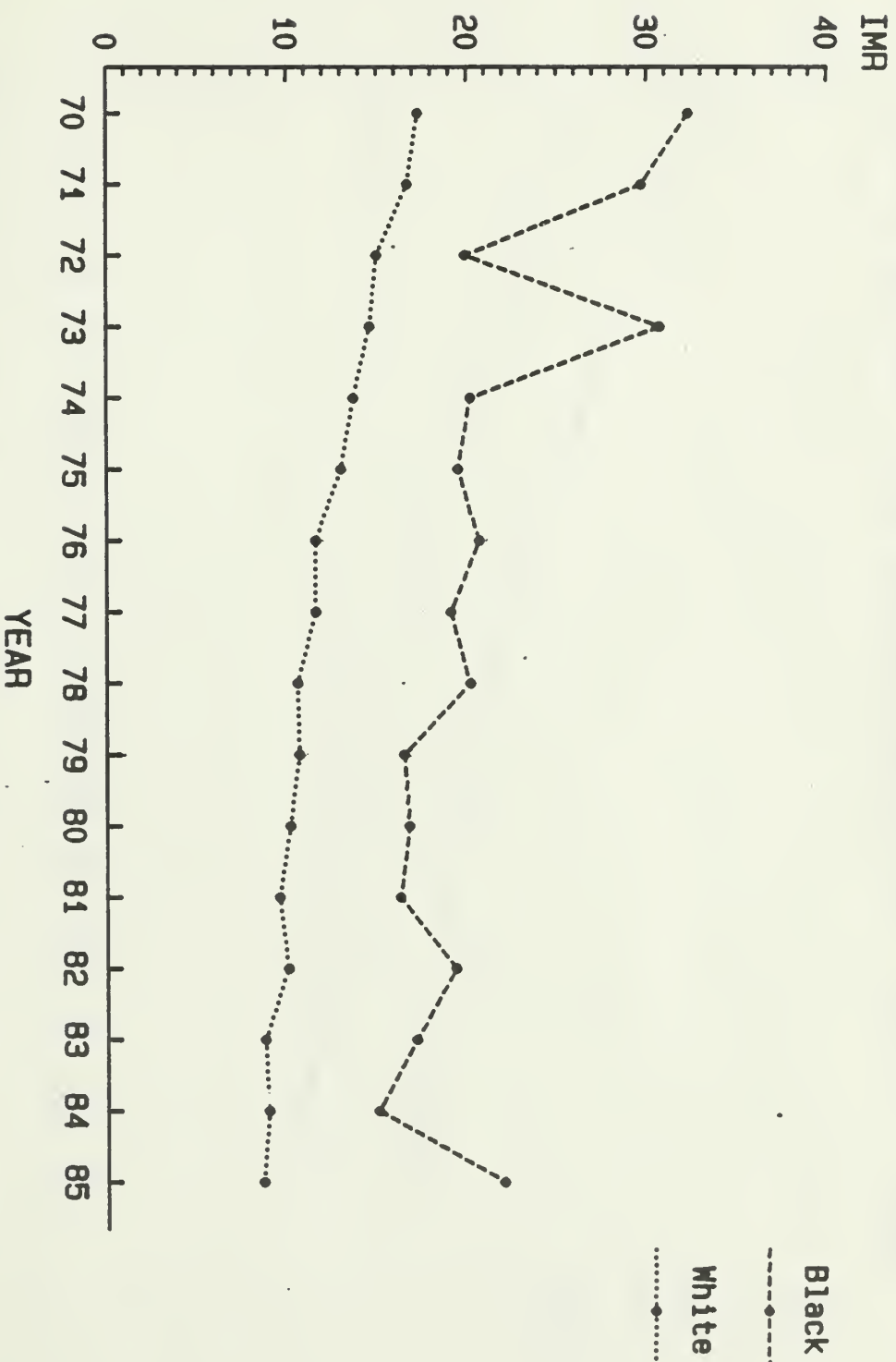
FIGURE 1
 INFANT MORTALITY RATES FOR MASSACHUSETTS AND THE
 UNITED STATES 1970 - 1984



* IMR - DEATHS UNDER 1 YEAR / 1000 LIVE BIRTHS
 PREPARED BY: DIVISION OF FAMILY HEALTH SERVICES,
 MDPH

DATA SOURCE: DIVISION OF HEALTH STATISTICS AND
 RESEARCH, MDPH, AND NATIONAL CENTER FOR HEALTH
 STATISTICS

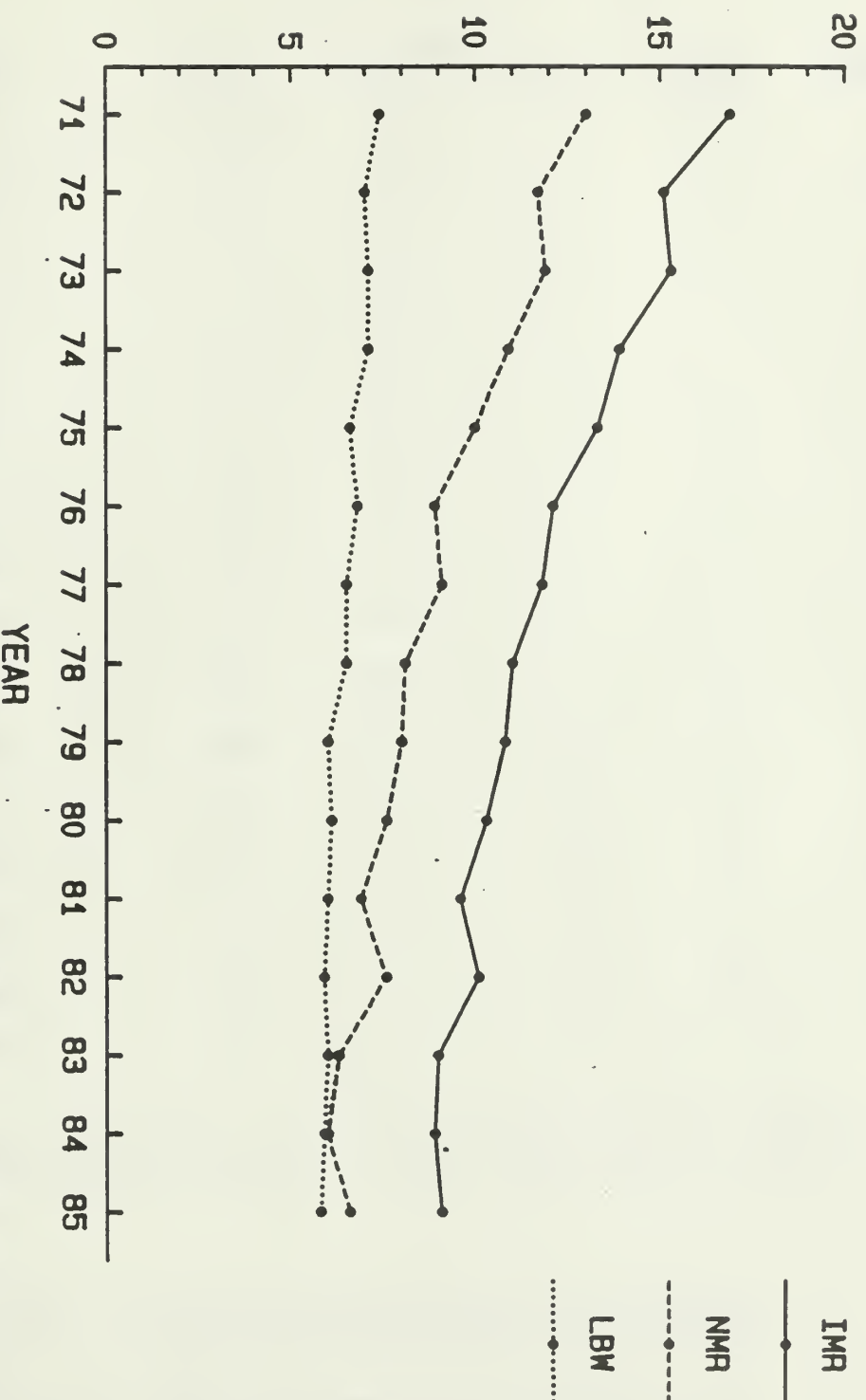
FIGURE 2
 INFANT MORTALITY RATES FOR MASSACHUSETTS BY RACE
 1970 - 1985



DATA SOURCE: DIVISION OF HEALTH STATISTICS AND
 RESEARCH, MDPH

PREPARED BY: DIVISION OF FAMILY HEALTH SERVICES,
 MDPH

FIGURE 3
 INFANT MORTALITY, NEONATAL MORTALITY, AND LOW
 BIRTH WEIGHT FOR MASSACHUSETTS, 1971 - 1985



IMR - DEATHS UNDER 1 YEAR PER 1000 LIVE BIRTHS
 NMR - DEATHS UNDER 28 DAYS PER 1000 LIVE BIRTHS
 LBW - BIRTHS < 2500 GRAMS PER 100 LIVE BIRTHS

DATA SOURCE: DIV. OF HEALTH STATISTICS AND
 RESEARCH, MDPH
 PREPARED BY: DIV. OF FAMILY HEALTH SERVICES, MDPH

TABLE 1
 INFANT MORTALITY RATES FOR
 MASSACHUSETTS RESIDENTS BY RACE 1970 - 1985

<u>YEAR</u>	<u>TOTAL</u>	<u>RACE</u>			
		<u>WHITE</u>	<u>BLACK</u>	<u>OTHER*</u>	<u>UNKNOWN</u>
1970	16.9	17.3	32.3	5.8	.7
1971	16.9	16.7	29.7	1.4	5.2
1972	15.1	15.0	19.9	10.9	4.3
1973	15.3	14.6	30.7	4.4	2.3
1974	13.9	13.7	20.2	8.6	0.0
1975	13.3	13.0	19.5	4.0	16.1
1976	12.1	11.6	20.7	9.2	14.8
1977	11.8	11.6	19.1	5.3	3.0
1978	11.0	10.6	20.2	2.1	5.9
1979	10.8	10.7	16.5	2.8	3.0
1980	10.3	10.2	16.8	4.0	1.5
1981	9.6	9.6	16.3	5.4	.9
1982	10.1	10.1	19.4	2.9	.6
1983	9.0	8.8	17.2	6.7	1.2
1984	8.9	9.0	15.1	6.8	1.2
1985	9.1	8.7	22.1	5.5	.3

* Includes Hispanic. There were no Hispanic deaths reported prior to 1979, and reporting of ethnicity is still considered to be unreliable.

Data Source: Division of Health Statistics and Research
 Massachusetts Department of Public Health

Data Analysis: Division of Family Health Services
 Massachusetts Department of Public Health

TABLE 2

INFANT MORTALITY RATES
FOR MASSACHUSETTS RESIDENTS 1984 AND 1985
FOR THE 25 CITIES WITH THE LARGEST NUMBER OF
BIRTHS RANKED BY 1985 INFANT MORTALITY RATES

<u>CITIES/TOWNS</u>	Number of Deaths		Number of Deaths	
	<u>1984</u>	<u>1984 IMR</u>	<u>1985</u>	<u>1985 IMR</u>
Boston	100	11.7	138	15.4
Cambridge	10	9.3	17	15.0
Lowell	20	11.6	26	14.8
Lynn	11	8.4	20	14.6
Brockton	24	14.8	23	13.3
Holyoke	10	13.4	10	12.4
Springfield	34	13.0	32	12.1
New Bedford	12	8.1	17	11.5
Pittsfield	5	7.4	7	10.9
Framingham	7	9.4	9	10.9
Worcester	27	11.2	28	10.8
Fitchburg	4	6.8	7	10.6
Taunton	7	9.7	7	10.3
Lawrence	21	16.1	15	9.9
Plymouth	3	5.2	6	8.9
Medford	7	9.9	6	8.3
Waltham	5	8.0	5	7.6
Fall River	7	5.1	10	7.3
Somerville	4	4.0	7	6.7
Chicopee	7	9.2	5	6.7
Quincy	14	14.2	7	6.6
Weymouth	9	13.3	4	5.9
Newton	3	3.7	5	5.7
Malden	5	7.0	4	5.0
Haverhill	8	<u>10.7</u>	3	<u>3.8</u>
Massachusetts	699	8.9	745	9.1

Data Source: Division of Health Statistics and Research
Massachusetts Department of Public Health

Data Analysis: Division of Family Health Services
Massachusetts Department of Public Health

TABLE 3

NEONATAL MORTALITY RATES
FOR MASSACHUSETTS RESIDENTS 1984 AND 1985
FOR THE 25 CITIES WITH THE LARGEST NUMBER OF
BIRTHS RANKED BY 1985 NEONATAL MORTALITY RATE

<u>CITIES/TOWNS</u>	Number of Deaths <u>1984</u>	<u>NMR 1984</u>	Number of Deaths <u>1985</u>	<u>NMR 1985</u>
Boston	66	7.7	101	11.3
Lowell	12	7.0	18	10.3
Brockton	17	10.5	23	9.8
Cambridge	6	5.6	10	8.8
Lynn	7	5.3	12	8.8
Springfield	24	9.2	23	8.7
Lawrence	12	9.2	13	8.6
Worcester	19	7.9	21	8.1
Pittsfield	3	4.4	5	7.8
New Bedford	5	3.4	11	7.4
Taunton	4	5.6	5	7.4
Framingham	4	5.4	6	7.3
Waltham	4	6.4	4	6.1
Plymouth	2	3.5	4	5.9
Fall River	4	2.9	8	5.8
Medford	7	9.9	4	5.6
Chicopee	4	5.3	4	5.4
Quincy	9	9.1	5	4.7
Fitchburg	1	1.7	3	4.6
Newton	1	1.2	4	4.5
Weymouth	5	7.4	3	4.4
Somerville	2	2.0	4	3.8
Malden	4	5.6	3	3.8
Haverhill	7	9.3	3	3.8
Holyoke	7	<u>9.3</u>	3	<u>3.7</u>
Massachusetts	472	6.0	538	6.6

Data Source: Division of Health Statistics and Research
Massachusetts Department of Public Health

Data Analysis: Division of Family Health Services
Massachusetts Department of Public Health

TABLE 4

INFANT MORTALITY RATES FOR BOSTON RESIDENTS
BY CENSUS TRACT, 1984 AND 1985,
RANKED BY 1985 INFANT MORTALITY RATES

<u>CENSUS TRACTS</u>	Number of Deaths <u>1984</u>	<u>IMR 1984</u>	Number of Deaths <u>1985</u>	<u>IMR 1985</u>
Roxbury	19	16.5	29	23.4
South Dorchester	20	19.6	24	20.9
North Dorchester	7	10.0	14	19.4
South End	5	11.7	8	18.3
Mattapan	15	12.2	22	17.1
Brighton/Allston	7	10.1	10	14.0
West Roxbury	1	3.4	3	11.0
Hyde Park	5	10.0	5	9.2
South Boston	7	16.8	4	9.2
Boston Proper	1	2.3	4	8.9
Jamaica Plain	6	12.5	4	8.3
East Boston	5	11.0	4	7.9
Roslindale	1	1.8	4	7.9
Charlestown	<u>1</u>	<u>5.7</u>	<u>0</u>	<u>0.0</u>
Total	100	11.7	135*	15.4

* In addition, there were 3 infants of unknown census tract in 1985.

Data Source: Division of Health Statistics and Research
Massachusetts Department of Public Health

Data Analysis: Division of Family Health Services
Massachusetts Department of Public Health

TABLE 5

NEONATAL MORTALITY RATES FOR BOSTON RESIDENTS
BY CENSUS TRACT, 1984 AND 1985,
RANKED BY 1985 NEONATAL MORTALITY RATES

<u>CENSUS TRACTS</u>	Number of Deaths <u>1984</u>	<u>NMR 1984</u>	Number of Deaths <u>1985</u>	<u>NMR 1985</u>
Roxbury	15	13.0	21	16.9
North Dorchester	6	8.6	12	16.6
South Dorchester	11	10.8	18	15.7
Brighton/Allston	4	5.8	9	12.6
Mattapan	8	6.5	15	11.6
East Boston	3	6.6	4	7.9
West Roxbury	1	3.4	2	7.3
South Boston	5	12.0	3	6.9
South End	3	7.0	3	6.9
Boston Proper	0	0.0	3	6.7
Jamaica Plain	5	10.4	3	6.3
Hyde Park	5	10.0	3	5.5
Roslindale	0	0.0	2	4.0
Charlestown	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.0</u>
Total	66	7.7	98*	11.3

* In addition, there were 3 neonatal deaths of unknown census tract.

Data Source: Division of Health Statistics and Research
Massachusetts Department of Public Health

Data Analysis: Division of Family Health Services
Massachusetts Department of Public Health

TABLE 6

INFANT MORTALITY RATES AND LOW BIRTHWEIGHT
BY MATERNAL RACE FOR MASSACHUSETTS RESIDENTS
1984 AND 1985

RACE/ETHNICITY	INFANT MORTALITY					
	<u>BIRTHS</u>		<u>DEATHS</u>		<u>IMR</u>	
	<u>1984</u>	<u>1985</u>	<u>1984</u>	<u>1985</u>	<u>1984</u>	<u>1985</u>
Hispanic	2892	3288	15	17	5.2	4.8
White	66246	68563	586	590	8.9	8.7
Black	4829	5099	82	126	17.0	22.1
Other	1683	1741	13	11	7.7	5.5
Unknown	2548	3085	3	1	1.2	.3
Massachusetts	78198	81776	699	745	8.9	9.1

RACE/ETHNICITY	LOW BIRTHWEIGHT					
	<u>BIRTHS</u>		<u>LBW <2500</u>		<u>LBW PERCENT</u>	
	<u>1984</u>	<u>1985</u>	<u>1984</u>	<u>1985</u>	<u>1984</u>	<u>1985</u>
Hispanic	2892	3288	248	274	8.6	8.3
White	66246	68563	3453	3549	5.2	5.2
Black	4829	5099	547	554	11.3	10.9
Other	1683	1741	109	85	6.5	4.9
Unknown	2548	3085	241	288	9.5	9.3
Massachusetts	78198	81776	4598	4750	5.9	5.8

Data Source: Division of Health Statistics and Research
Massachusetts Department of Public Health

Data Analysis: Division of Family Health Services
Massachusetts Department of Public Health

TABLE 7

LOW BIRTHWEIGHT FOR MASSACHUSETTS RESIDENTS
1984 AND 1985 FOR THE 25 CITIES WITH THE
LARGEST NUMBER OF BIRTHS RANKED BY 1985
PERCENT OF LOW BIRTHWEIGHT

CITIES/TOWNS	1985 BIRTHS	LOW BIRTHWEIGHT (percent <2500 grams)	
		<u>1984</u>	<u>1985</u>
Boston	8938	9.3	8.4
Taunton	677	4.4	8.1
New Bedford	1482	6.5	8.0
Pittsfield	640	5.5	7.8
Fall River	1371	7.0	7.7
Springfield	2636	8.0	7.6
Worcester	2588	7.4	6.8
Lynn	1367	6.2	6.7
Weymouth	677	6.2	6.6
Holyoke	806	7.9	6.4
Framingham	827	4.6	6.3
Lowell	1251	5.9	6.3
Chicopee	745	7.1	6.0
Waltham	654	4.8	6.0
Cambridge	1133	6.7	5.8
Brockton	1729	7.3	5.6
Fitchburg	659	5.6	5.5
Quincy	1054	6.5	5.4
Medford	720	6.2	5.3
Lawrence	1510	6.0	5.2
Haverhill	787	4.7	5.2
Plymouth	674	7.5	5.2
Newton	881	5.2	5.0
Somerville	1040	6.5	4.8
Malden	794	5.2	3.6
Massachusetts	81776	5.9	5.8

Data Source: Division of Health Statistics and Research
Massachusetts Department of Public Health

Data Analysis: Division of Family Health Services
Massachusetts Department of Public Health

TABLE 8

LOW BIRTHWEIGHT FOR BOSTON RESIDENTS
BY CENSUS TRACT, 1984 AND 1985,
RANKED BY 1985 PERCENT LOW BIRTHWEIGHT

<u>CENSUS TRACT</u>	<u>PERCENT LOW BIRTHWEIGHT</u>	
	<u>1984</u>	<u>1985</u>
Roxbury	14.2	13.4
South End	7.8	10.3
South Dorchester	11.0	9.4
Mattapan	11.1	8.9
North Dorchester	8.5	8.6
Boston Proper	6.7	8.0
Jamaica Plain	5.6	7.3
East Boston	6.2	6.7
Roslindale	7.9	6.5
South Boston	7.7	6.4
Allston/Brighton	9.5	6.4
Hyde Park	6.6	4.9
West Roxbury	5.5	4.0
Charlestown	6.9	1.6
<hr/> Total	<hr/> 9.3	<hr/> 8.4

Data Source: Division of Health Statistics and Research
Massachusetts Department of Public Health

Data Analysis: Division of Family Health Services
Massachusetts Department of Public Health

TABLE 9

ADEQUACY OF PRENATAL CARE UTILIZATION FOR
MASSACHUSETTS RESIDENTS 1981 THROUGH 1985 FOR THE
25 CITIES WITH THE LARGEST NUMBER OF BIRTHS
RANKED BY 1985 ADEQUACY OF PRENATAL CARE UTILIZATION

<u>CITIES/TOWNS</u>	<u>PERCENT ADEQUATE PRENATAL CARE UTILIZATION</u>				
	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>
Holyoke	61.4	60.8	43.4	51.4	52.2
Brockton	72.7	75.3	70.7	63.8	61.3
Lowell	55.2	64.3	64.6	68.7	63.2
Lawrence	71.4	67.5	70.3	70.9	63.5
Fall River	62.4	63.8	66.3	66.2	66.3
Fitchburg	71.3	63.1	69.6	69.9	67.2
Springfield	78.0	72.6	61.5	68.8	67.9
Taunton	78.8	76.0	73.6	70.1	69.3
New Bedford	81.5	73.1	64.7	65.2	69.6
Boston	72.3	74.8	77.3	78.8	71.8
Lynn	78.7	72.5	68.1	71.8	73.2
Pittsfield	83.6	81.8	80.5	79.1	74.1
Plymouth	82.1	83.5	78.8	78.1	75.7
Chicopee	81.5	78.4	66.1	75.4	76.4
Somerville	80.5	81.4	80.5	78.9	76.9
Worcester	80.5	79.3	78.9	80.1	80.0
Haverhill	80.4	75.5	81.5	79.3	80.0
Malden	81.5	80.3	84.1	79.2	80.0
Medford	85.9	85.3	86.1	83.3	80.0
Cambridge	79.0	81.2	78.2	83.0	81.9
Waltham	84.6	86.6	86.5	86.1	86.2
Weymouth	87.8	86.8	92.0	89.4	87.4
Quincy	84.9	86.5	88.4	88.5	89.1
Framingham	86.6	92.7	88.5	91.0	91.8
Newton	89.5	88.3	88.1	92.3	92.2
Massachusetts	<u>83.0</u>	<u>82.3</u>	<u>79.8</u>	<u>79.7</u>	<u>78.6</u>

Data Source: Division of Health Statistics and Research
Massachusetts Department of Public Health

Data Analysis: Division of Family Health Services
Massachusetts Department of Public Health

TABLE 10

TOTAL BIRTHS TO TEENAGERS (AGED 19 OR UNDER)
 FOR MASSACHUSETTS RESIDENTS 1984 AND 1985
 FOR THE 25 CITIES WITH THE LARGEST NUMBER
 OF BIRTHS RANKED BY 1985 PERCENT OF TEEN BIRTHS

<u>CITIES/TOWNS</u>	% #	% #
Holyoke	21.2(159)	23.3(188)
Lawrence	18.4(240)	18.1(273)
Fall River	17.2(237)	17.5(240)
Springfield	17.6(460)	15.9(419)
Fitchburg	14.4(85)	15.2(100)
New Bedford	15.4(227)	15.0(222)
Lowell	14.6(251)	14.9(261)
Brockton	14.0(227)	14.0(242)
Boston	13.3(1134)	13.3(1189)
Lynn	12.2(161)	12.7(174)
Worcester	12.6(303)	12.2(316)
Taunton	12.2(88)	11.4(77)
Pittsfield	11.1(75)	10.8(69)
Haverhill	11.4(86)	10.5(83)
Chicopee	8.9(67)	8.3(62)
Somerville	8.0(80)	8.2(85)
Plymouth	6.2(36)	6.7(45)
Weymouth	6.8(46)	6.5(44)
Cambridge	5.9(64)	6.0(68)
Framingham	5.3(39)	5.8(48)
Quincy	5.4(53)	5.4(57)
Waltham	5.7(36)	4.7(31)
Medford	4.6(32)	4.6(33)
Malden	4.9(35)	3.8(30)
Newton	1.2(10)	1.2(11)
<hr/> Massachusetts	<hr/> 9.0(7038)	<hr/> 8.5(6951)

Data Source: Division of Health Statistics and Research
 Massachusetts Department of Public Health

Data Analysis: Division of Family Health Services
 Massachusetts Department of Public Health

